

Appl. No. 10/001,521
Amdt. dated November 29, 2005
Reply to Office action of June 2, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

5

Listing of Claims:

- 1 1. (Currently Amended): A method for conducting ~~the~~ an exchange of data with a
2 terminal-based application program comprising the steps of:
3 (a) mapping a plurality of available states within a terminal data stream of the
4 terminal-based application program to respective discrete state definitions within a finite
5 state machine, including:
6 (1) interpreting any element, terminal command, data item, or sequence of
7 terminal commands and data items within the terminal data stream as a discrete
8 state having a respective one of the state definitions, and
9 (2) using an object model containing a set of interfaces, said interfaces being
10 utilized as ~~the~~ a basis for the state definitions; and
11 (b) defining a plurality of state transition rules which are utilized to manipulate the
12 state definitions within the finite state machine.
- 1 2. (Original): The method of claim 1, wherein the object model contains the set of
2 interfaces and a set of classes.
- 1 3. (Original): The method of claim 1, wherein manipulation of the state transition
2 rules allows for two-way communication between a client and the terminal-based
3 application program.
- 1 4. (Original): The method of claim 1, further comprising creating one or more data
2 sets, each comprising a definable set of data elements from within the terminal-based
3 application program.

Appl. No. 10/001,521
Amdt. dated November 29, 2005
Reply to Office action of June 2, 2005

1 5. (Original): The method of claim 1, wherein the object model is a distributed
2 object transaction model, which allows for access to data from the terminal-based
3 application program by any local or remote client service, system, or application.

1 6. (Original): The method of claim 1 further comprising unifying and resolving
2 multiple terminal-based applications through unification and resolution of a plurality of
3 instances of a program that performs steps (a) and (b).

1 7. (Original): The method of claim 6, further comprising creating a plurality of data
2 sets, each data set being formed through a unification of multiple data sets from the
3 plurality of instances of the program that performs steps (a) and (b).

1 8. (Original): The method of claim 6, wherein each object model is a distributed
2 object transaction model which allows for access to data from the terminal-based
3 application program by any local or remote client service, system, or application.

1 9. (Original): The method of claim 6, further comprising using an expert system
2 which accesses and resolves data items from the plurality of instances of the program that
3 performs steps (a) and (b) and translates them into cohesive super sets of data.

1 10. (Currently Amended): The method of claim 9, further comprising using the object
2 model for ~~the creation of~~ creating data resolution and translation rules.

1 11. (Currently Amended): The method of claim 9 further comprising using the object
2 model for definition of actions to proactively resolve data errors or discrepancies across
3 ~~the an~~ underlying plurality of instances of the program that performs steps (a) and (b).

1 12. (Currently Amended): The method of claim 1, further comprising altering an
2 interface presented to a user of the terminal-based application program through addition
3 of one of ~~the a~~ group consisting of new screens and new data fields within existing

Appl. No. 10/001,521
Amdt. dated November 29, 2005
Reply to Office action of June 2, 2005

4 screens, wherein the new screens and new data fields are populated with data retrieved
5 from an alternate data source.

1 13. (Original): The method of claim 12, further comprising monitoring the terminal
2 data stream.

1 14. (Original): The method of claim 13, further comprising:
2 recognizing pre-defined states within the terminal data stream, which define one
3 or more states during a user's interaction with the terminal-based application program;
4 and
5 presenting the new data screens or fields to the user.

1 15. (Original): The method of claim 12, wherein the object model describes
2 interaction between the alternate data source and a program that performs steps (a) and
3 (b).

1 16. (Original): The method of claim 12, wherein the object model describes:
2 the addition of new user screens or the addition of new data fields to existing
3 application screens, and
4 interaction between the user and the new screens or fields.

1 17. (Original): The method of claim 1 further comprising using software tools to
2 automate creation and maintenance of an integration system based on knowledge of a
3 domain of the terminal-based application program.

1 18. (Currently Amended): A system for conducting the-an exchange of data with a
2 terminal-based application program comprising:
3 a finite state machine, in which a plurality of available states within a terminal
4 data stream of the terminal-based application program are mapped to respective discrete
5 state definitions, including:

Appl. No. 10/001,521
Amdt. dated November 29, 2005
Reply to Office action of June 2, 2005

6 means for interpreting any element, terminal command, data item, or
7 sequence of terminal commands and data items within the terminal data stream as
8 a discrete state having a respective one of the state definitions;
9 means for using an object model containing a set of interfaces, said
10 interfaces being utilized as ~~the~~ a basis for the state definitions; and
11 means for defining a plurality of state transition rules which are utilized to
12 manipulate the state definitions within the finite state machine.

1 19. (Original): The system of claim 18, wherein the object model contains the set of
2 interfaces and a set of classes.

1 20. (Canceled):

1 21. (Canceled):

1 22. (Canceled):

1 23. (Original): The system of claim 18 wherein multiple terminal-based applications
2 are unified and resolved through unification and resolution of a plurality of instances of
3 the finite state machine.

1 24. (Original): The system of claim 23, further comprising a plurality of data sets,
2 each data set being formed through a unification of multiple data sets from the plurality
3 of instances of the finite state machine.

1 25. (Original): The system of claim 23, wherein each object model is a distributed
2 object transaction model which allows for access to data from the terminal-based
3 application program by any local or remote client service, system, or application.

Appl. No. 10/001,521
Amdt. dated November 29, 2005
Reply to Office action of June 2, 2005

1 26. (Original): The system of claim 23, further comprising an expert system which
2 accesses and resolves data items from the plurality of instances of the finite state machine
3 and translates them into cohesive super sets of data.

1 27. (Currently Amended): The system of claim 26, wherein the object model is used
2 for the creation of creating data resolution and translation rules.

1 28. (Currently Amended): The system of claim 26 wherein the object model is used
2 for definition of actions to proactively resolve data errors or discrepancies across ~~the~~ an
3 underlying plurality of instances of the finite state machine.

1 29. (Currently Amended): The system of claim 18, further comprising an interface
2 presented to a user of the terminal-based application program, the interface formed
3 through addition of one of the a group consisting of new screens and new data fields
4 within existing screens, wherein the new screens and new data fields are populated with
5 data retrieved from an alternate data source.

1 30. (Original): The system of claim 29, further comprising means for monitoring the
2 terminal data stream.

1 31. (Original): The system of claim 30, wherein:
2 pre-defined states are recognized within the terminal data stream, which define
3 one or more states during a user's interaction with the terminal-based application
4 program; and
5 the new data screens or fields are presented to the user.

1 32. (Original): The system of claim 29, wherein the object model describes
2 interaction between the alternate data source and the finite state machine.

1 33. (Original): The system of claim 29, wherein the object model describes:

Appl. No. 10/001,521
Amdt. dated November 29, 2005
Reply to Office action of June 2, 2005

2 the addition of new user screens or the addition of new data fields to existing
3 application screens, and
4 interaction between the user and the new screens or fields.

1 34. (Original): The system of claim 18 further comprising software tools that
2 automate creation and maintenance of an integration system based on knowledge of a
3 domain of the terminal-based application program.

1 35. (Currently Amended): The system of claim 18, further comprising a tool which
2 automates the capture of a terminal data stream and the creation of state definitions for a
3 particular terminal-based application.

1 36. (Original): The system of claim 35, wherein the tool allows the user to define the
2 data sets which will be made available.

1 37. (Original): The system of claim 36, wherein the tool allows the user to define
2 state transition rules to access and manipulate the data sets, to read and write data
3 elements, using a point-and-click flowchart-style interface.

1 38. (Original): The system of claim 35, further comprising software tools which
2 automate creation and maintenance of a unification and resolution system based on a
3 knowledge of underlying integration systems being unified.

1 39. (Original): The system of claim 35, wherein the tool allows the user to define the
2 data super-sets which will be made available by the system.

1 40. (Original): The system of claim 35, wherein the tool allows the user to create and
2 define data unification and resolution rules.

1 41. (Original): The system of claim 35, wherein the tool allows allows the user to
2 define rules to manage data errors and discrepancies in the terminal data stream.

Appl. No. 10/001,521
Amdt. dated November 29, 2005
Reply to Office action of June 2, 2005

1 42. (New): A computer readable medium encoded with computer program code,
2 wherein when the computer program code is executed by a processor, the processor
3 performs a method for conducting the exchange of data with a terminal-based application
4 program comprising the steps of:

5 (a) mapping a plurality of available states within a terminal data stream of the
6 terminal-based application program to respective discrete state definitions within a finite
7 state machine, including:

8 (1) interpreting any element, terminal command, data item, or sequence of
9 terminal commands and data items within the terminal data stream as a discrete
10 state having a respective one of the state definitions, and

11 (2) using an object model containing a set of interfaces, said interfaces being
12 utilized as the basis for the state definitions; and

13 (b) defining a plurality of state transition rules which are utilized to manipulate the
14 state definitions within the finite state machine.

1 43. (New): The computer readable medium of claim 41, wherein the method further
2 comprises unifying and resolving multiple terminal-based applications through
3 unification and resolution of a plurality of instances of a program that performs steps (a)
4 and (b).

1 44. (New): The computer readable medium of claim 41, wherein the method further
2 comprises using software tools to automate creation and maintenance of an integration
3 system based on knowledge of a domain of the terminal-based application program.